

profitable for observers farther east to make careful search for this species so little known in our New England flora.

A seemingly overlooked record for this plant is that of the late Prof. L. N. Johnson,<sup>1</sup> who observed it in the sand along the edge of Mill River, near Samp Mortar Rock, Fairfield. This station is several miles inland and at an elevation of about twenty-five feet. Within my own experience it is confined to the coastal plain, and never in strictly sandy soil.

BRIDGEPORT, CONNECTICUT.

### COLLECTING SEaweEDS IN THE TROPICS.

[THE conditions under which collecting must be done vary much in different regions, and perhaps in no department is the difference more marked than with algae. The following notes, though not an addition to our knowledge of the botany of New England, may yet be of interest to New England botanists. They are in a letter from Mrs. C. E. Pease of Malden, describing the experiences of herself and her sister, Miss Eloise Butler of Minneapolis, Minn., on visits to the island of Jamaica, the chief object of the visits being the collection of algae. — F. S. C.]

SOMETIMES the weeds were at long distances from the shore, yet growing in shallow water in eel grass or on coral reefs and ledges. Most of our seaweeding was done from boats rowed by two or three strong experienced boatmen. We would be rowed out to the reefs or to the shallow places overgrown with grass, the water even there being up to our waists; then jump from the boat into the water, to fish about for our weeds. Of course we always wore bathing suits while seaweeding, and boy's thick hip rubber boots. On the reefs or by the ledges the waves were often strong enough to take us off our feet. Then we would cling closely together, one holding on to the other while she plunged in for the weeds. Even then we would sometimes be washed from our footing. The boatmen would be busy keeping the boat from being dashed on the rocks, and stand ready to assist us back into the boat, often with the greatest difficulty.

Even if the weeds grew near land, often the shores were so precipitous that to reach the weeds we must row to them.

*Avrainvillea longicaulis*, at Montego Bay, grew embedded in mud among eel grass in shallow water near a small island consisting of a

<sup>1</sup> Bull. Torr. Club, xix: 89.



mangrove swamp. It was discovered by the sense of feeling as we were digging in the mud among the eel grass roots for *Caulerpa*. We were continually feeling through the thick soles of our heavy rubber boots, a sensation as of stepping on drowned kittens. With fear and trembling we put our hands down to investigate, and pulled up the curious fleshy weed somewhat resembling a downy, swollen *Udotea*. The plants harbored numerous worms and other small sea animals.

At Port Antonio was our happy hunting ground in 1894, a coral reef running out from the base of a steep bluff. The water was extremely shallow out some distance. Perhaps we had half an acre of safe wading. We did not consider it safe to wade where we could not see the bottom, owing to sharks, octopi, etc. At this place we waded out to where the surface was jagged and rocky, the water about to our waists. At this depth we found *Caulerpa clavifera* growing like lovely little clusters of green grapes, in big soggy masses. Here also were clumps of all those limy things, *Halimeda*, *Amphiroas*, *Galaxauras*, *Cymopolias*, etc. They followed inshore, and with them upon the rocks were those green, warty, potato-ball-like *Dictyosphaerias*. Nearer the shore the water flattened out to nothing, and the bottom was sand, like powdered shells. Most of the plants mentioned dropped out, but *Caulerpa ericifolia* and *C. plumaris* covered the bottom, as club mosses grow in the woods. Such a pretty sight! Day after day we searched this reef for the "Mermaid's Shaving brush" you had told us we would most likely find, but were giving up in despair, and were leaving the water for the last time when just at the shore, the water barely deep enough to cover them, I noticed peculiar little raised mounds in the sand. With my foot I brushed them over and revealed the *Penicillus capitatus*, so long searched for. They grew as abundantly as seedling evergreens in a neglected Maine pasture lot, and we hastily brushed the sand aside and gathered as many as we could carry.

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WEBERA PROLIGERA IN AMESBURY, MASSACHUSETTS. — I have been much interested of late in the study of those mosses which do not multiply themselves alone by the agency of spores, but by means of vegetative growths serving the same purpose. It is astonishing how abundant these plants will become in regions where it is almost impossible to find the least sign of fruit. There is a small brook in this town about a mile in length, flowing through sandy land